

XFS Device Programming with VB.NET

Course Outline



VB.NET



ATM
SOFTWARE



DURATION : 2 DAYS

A basic knowledge of ATMs is assumed as a prerequisite for this workshop along with Visual Basic Programming Skills - MS .NET VB.NET. The workshops, which can be tailored to individual needs, will cover the following general areas:

- Introduction to CEN/XFS, background, standards, vendors
- Card Readers : Motorised, Dip and Swipe
- Cash Dispenser : How to configure, dispense and manage the Cash Dispenser in the XFS Environment
- Keyboard / Encryptor : Using the PinPAD as a Keyboard and an Encryptor
- Receipt Printer : Use the Receipt Printer to explore printing in the XFS Environment
- Sensors And Indicators : How to configure and use Consumer Lights, In-Service Lights, Switches
- Supervisor : How to enter Supervisor, using Operator Panels and XFS Vendor Dependent Mode

The course is high-paced, predominantly workshop based, with some classroom teaching. By the end of the course, the candidate should have a working ATM mini-application. The breakdown by lesson is as follows:-



LESSON 1: INTRODUCTORY OVERVIEW

Purpose :- This lesson provides an overview of the CEN / XFS Environment

Objectives:- Upon successful completion of this lesson you will be able to:

History of CEN / XFS

List the major vendors participating in the CEN / XFS Workshops

Define what ActiveX COM Controls are

List the characteristics of an ActiveX implementation of the CEN/XFS API

Review the various ActiveX XFS Products available on the market

How XFS facilitates easy Vendor Independent developments

Discuss how to access the ActiveX XFS Controls in VB.NET

LESSON 2: CARD READER

Purpose:- This lesson discusses the XFS Capabilities of the Card Reader

Objectives:- Upon successful completion of this lesson you will be able to:

Describe the major properties, methods and event associated with the XFS Card Reader Object

Read data from a magnetic stripe card using the ReadRawData Method

Write data to a card using the WriteRawData Method

Eject or Capture a card from the Card Reader

Review the CEN / XFS Forms Concept



LESSON 3: CASH DISPENSER

Purpose:- This lesson describes how to program the XFS Cash Dispenser

Objectives:- Upon successful completion of this lesson you will be able to:

- Describe the major properties, methods and event associated with the XFS Cash Dispenser Object
- Describe the concept of an XFSCashUnit
- Configure the XFS Cash Dispenser
- Determine Note Mix
- Dispense Cash

LESSON 4: KEYBOARD / ENCRYPTOR

Purpose:- This lesson discusses the usage of the XFS PinPad for Keyboard Entry and Encryption

Objectives:- Upon successful completion of this lesson you will be able to:

- Describe the major properties, methods and event associated with the XFS PinPAD Object
- Obtain Consumer Keyboard Input using the ReadData Method
- Setting the Active Keys
- Identifying the Keys Pressed
- Identifying the Data Entered
- Import an Encryption Key
- Getting a consumer PIN securely



LESSON 5: RECEIPT PRINTER

Purpose:- Discuss the XFS Printing Environment using the Receipt Printer

Objectives:- Upon successful completion of this lesson you will be able to:

- Describe the major properties, methods and event associated with the XFS Receipt Printer Object
- Use the SendRawData Command to send data to the printer for printing
- Use PrintForm Command to print on the receipt printer
- Use Eject Command

LESSON 6: SENSORS AND INDICATORS

Purpose:- This lesson discusses various indicators available on the ATM and how to use them in XFS

Objectives:- Upon successful completion of this lesson you will be able to:

- Describe the major properties, methods and event associated with the XFS Sensor And Indicator s Object
- How to work with Door Sensors, Alarm Sensors, Switches
- How to manage Consumer Guidance Lights
- Audio Controls



LESSON 7: SUPERVISOR MODE – ENHANCED OPERATOR PANEL

Purpose:- This lesson describes the Supervisor / VDM Concept and use of the EOP

Objectives:- Upon successful completion of this lesson you will be able to:

- Describe the major properties, methods and event associated with the XFS Vendor Dependent Mode Object
- Describe the major properties, methods and event associated with the XFS Text Terminal Object
- Configure how to Enter and Exit and view Vendor Dependent Mode
- Use EOP to Display Text and Action Toggle Switches

WORKSHOPS

Purpose:-The purpose of the workshop exercises is to reinforce theoretical learning through the completion of practical tasks.

Objectives:- Upon successful completion of the workshops you will be able to:

- Accept, Read and Eject a Consumer Card
- Accept User Entry / PIN Entry Data
- Import an Encryption Key
- Configure and Dispense a Consumer Selected Amount
- Print and Eject a Receipt on the Receipt Printer
- Enter Vendor Dependent Mode and Use the Enhanced Operator Panel

Completion of the workshops will lead to an ATM mini-application demonstrating some of the fundamental principles of CEN / XFS and, linking elements together to produce a working consumer experience